JOURNAL OF ALLOYS AND COMPOUNDS

An Interdisciplinary Journal of Materials Science and Solid–State Chemistry and Physics

AUTHOR INFORMATION PACK

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DESCRIPTION

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The keywords for the *Journal of Alloys and Compounds* are separated into four categories:

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actinide alloys and compounds
amorphous materials
ceramics
clusters
coating materials
composite materials
data storage materials
disordered systems
electrode materials
energy storage materials
ferroelectrics
fuel cells
fullerenes
half metals
heterojunctions
high-temperature alloys
high-Tc superconductors
hydrogen absorbing materials
inorganic materials
insulators
intermetallics
interstitial alloys
liquid crystals
magnetic films and multilayers
magnetically ordered materials
metal hydrides
metallic glasses
metal matrix composites
metals and alloys
nanostructured materials
nitride materials
nuclear reactor materials
optical materials
oxide materials

permanent magnets
phosphers
polymers, elastomers, and plastics
quantum wells
quasicrystals
rare earth alloys and compounds
semiconductors
spin glasses
superconductors
surfaces and interfaces
thin films
transition metal alloys and compounds
thermoelectic materials

B. Preparation and Processing

amorphisation
chemical synthesis
crystal growth
gas-solid reactions
laser processing
liquid-solid reactions
precipitation
powder metallurgy
mechanical alloying
mechanochemical processing
nanofabrications
rapid-solidification, quenching
sintering
sol-gel processes
solid state reactionsa
vapor deposition

C. Phenomena

atomic scale structure
acoustic properties
anisotropy
anharmonicity
catalysis
composition fluctuations
crystal structure
corrosion
crystal and ligand fields
crystal binding and equation of state
cyclotron resonance
dielectric response
diffusion
dislocations and disclinations
domain structure
elasticity
electrical transport
electrochemical reactions
electromotive force, EMF
electron-electron interactions
electron-phonon interactions
electronic band structure
electronic properties
enthalpy
entropy
exchange and superexchange
fractional quantum Hall effect
flux pinning and creep

galvanomagnetic effects
grain boundaries
heat capacity
heat conduction
heavy fermions
hyperfine interactions
ionic conduction
impurities in semiconductors
kondo effect
kinetics
magentisation
magnetocaloric
magnetoresistance
magnetostriction
magneto-volume effects
mechanical properties
microstructure
noise
optical properties
order-disorder effects
oxidation
phase diagrams
phase transitions
phonons
photoconductivity and photovoltaics
piezoelectricity, electrostrition
preferential site ordering
point defects
quantum Hall effect
quantum localization
radiation effects
recombination and trapping
shape memory
spin dynamics
spin-orbit effects
thermal expansion
thermodynamic properties
thermoelectric
thermochemistry
tunnelling
vacancy formation
valence fluctuations

D. Experimental and Theoretical Methods

atomic force microscopy, AFM
atom, molecule, and ion impact
calorimetry
computer simulations
elastic light scattering
electrochemical impedance spectroscopy
electron emission spectroscopies
electron energy loss spectroscopy
electron paramagnetic resonance
EXAFS, NEXAFS, SEXAFS
high-pressure
high magnetic fields
inelastic light scattering
inelastic neutron scattering
light absorption and reflection
luminescence
magnetic measurements

Mössbauer spectroscopy
metallography
molecular dynamics simulations
muon spectroscopies
neutron diffraction
nonlinear optics
nuclear resonances
optical spectroscopy
perturbed angular correlations, PAC
photoelectron spectroscopies
positron spectroscopies
Rutherford backscattering, RBS
scanning electron microscopy, SEM
scanning tunnelling microscopy, STM
strain, high pressure
surface electron diffraction (LEED, RHEED)
synchrotron radiation
thermal analysis
thermodynamic modeling
time-resolved optical spectroscopies
transmission electron microscopy, TEM
X-ray diffraction
X-ray and gamma-ray spectroscopies
Ultrasonics

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